

## **Eco-Industrial Parks**

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The President's Council on Sustainable Development (PCSD) defines an Eco-Industrial Park (EcoPark) as:

“A group of businesses that work together and with the community to efficiently share resources (materials, water, energy, infrastructure, natural habitat and information), enhance economic prosperity and improve the environment.”

Wastes of one business in an EcoPark become resources of another business, to reduce costs and obtain added value from discarded materials. Over the past decade, much work has been done to promote EcoParks around the United States, particularly with the leadership of the PCSD. Several demonstration projects have been developed (link to “Zero Emission Park” and “Virtual Eco-Park” descriptions). Many others are in the planning stages (link to PCSD website).

Eco-Parks offer an opportunity for recycling market development planners to leverage interest in Eco-Parks and “Green Building” to obtain assistance in attracting reuse, recycling and composting businesses to be part of planned Eco-Parks in their area. In some areas, reuse, recycling and composting businesses might become the main focus for an Eco-Park, also known as a “Resource Recovery Park.”

## **Resource Recovery Parks**

A Resource Recovery Park (RR Park) is the co-location of reuse, recycling and composting processing, manufacturing and retail businesses in a central facility to which the public can bring all their wastes and recoverable materials.

A RR Park enables the public to decrease their waste disposal costs, recover some value from their discards and buy other items at bargain prices.

A RR Park enables participating businesses to share: space and facilities; operating equipment (e.g., forklifts, balers, shredders, loaders and trucks); technical, administrative and professional services; promotions and advertising; communications equipment and services (e.g., copiers, computers, websites, fax, radios, phones); staff recruitment and training; and educational facilities and services.

There are a number of ways that RR Parks could be developed:

- ◆ **Zoning** of a district within a community specifically for such businesses
- ◆ **Siting** of these businesses on or **around a landfill or a transfer station**
- ◆ **Renovating** one or more **abandoned buildings** or industrial site (e.g., brownfield or military base) for such businesses
- ◆ **Co-Promoting** of nearby reuse, recycling and composting businesses
- ◆ **Master Plan** to attract these types of businesses to available site (like an auto mall)

Examples of RR Parks highlighted in a recent case study on *Resource Recovery Parks* prepared for the CA Integrated Waste Management Board include: Cabazon Resource Recovery Park (Mecca, CA), Monterey Regional Environmental Park (Marina, CA), Urban Ore Resource Recovery Park (Berkeley, CA) and Waste Management, Inc. Resource Recovery Park (San Leandro, CA). There may be many more examples of this natural economic clustering of reuse, recycling and composting businesses around the country, although they may not be calling themselves a “Resource Recovery Park.”

### **Implications for Recycling Market Development**

RR Parks offer an exciting new prospect for recycling market development officials (RMDOs). RMDOs could identify major players interested in developing a RR Park in their area, such as a Solid Waste Authority, Community Development Corporation, a Redevelopment Agency, or a private real estate developer. RMDOs should explore the interest of local reuse, recycling, composting and recycled product businesses and waste management companies in participation as well.

Different approaches to RR Parks highlighted above could be pursued by RMDOs. RMDOs could work with existing reuse, recycling and composting businesses to co-promote each other's activities, to encourage the public to think of all of their available services when constructing, remodeling or demolishing buildings or projects. RMDOs could also work with existing businesses to develop a new zoning district or to renovate an abandoned building or brownfield in a community to co-locate those businesses over time.

RMDOs could also use the RR Park concept to distinguish their community from others seeking to attract reuse, recycling and/or composting businesses. By developing a RR Park, the RMDO is demonstrating much more leadership, commitment and support for such businesses than an average recycling market development program. This may be the edge needed to attract additional recycling businesses, investors, or both.

### **How RMDOs Could Help**

RMDOs could help develop RR Parks through

- ◆ Siting
- ◆ Planning
- ◆ Promotions
- ◆ Other assistance

A first step for many RMDOs may be fostering local networks and waste exchanges among local reuse, recycling and composting businesses, as in a virtual EcoPark, to get the concept started. From the success of such networks, participating businesses may see the value of cooperating on a larger scale as part of a co-located RR Park.

### **Siting Assistance**

Some RR Parks are developing as a natural clustering of reuse, recycling and composting businesses on the site of, or around, a landfill or transfer station. These are probably the best short-term prospects for RR Park development. RMDOs could explore if land is available near local landfills or transfer stations, and explore with the public or private owners of these sites if they are interested in developing a RR Park with other related businesses.

Alternatively, RMDOs could identify sites (e.g., brownfield sites or abandoned buildings) that could serve as a site for a RR Park. RMDOs could either work to acquire control of a site, or identify a site that is open to being developed in this way.

RR Parks do not have to be grandiose in scale, and could succeed on a smaller scale in a rural area or an urban brownfield. Small scale RR Parks focus on attracting appropriate size reuse, recycling and composting businesses that meet local needs.

### **Planning**

RMDOs could bring interested parties together as a Task Force or Planning Committee to explore the concept of the RR Park, then to pursue a feasibility study for such a project in their community. Feasibility studies could be funded from: solid waste enterprise funds; local, state or federal economic or community development funds (e.g., EDA, HUD, CDBG), US EPA Brownfields funding or local public/private partnerships (e.g., several local agencies and businesses each contributing a portion of the funds needed).

Feasibility studies could be designed to:

- ◆ Identify target wastes
- ◆ Explore interest of local reuse, recycling, composting or recycled product businesses in expanding and/or participating in a RR Park
- ◆ Identify other types of businesses that could be attracted to a RR Park to address targeted wastes
- ◆ Identify estimated throughputs of materials and preliminary estimates of economics for proposed businesses
- ◆ Identify policies and processes on how to respond to proposals to participate in the project (e.g., from recycling companies)
- ◆ Identify administrative structure, next steps to implement project, public and private roles, budget and timeline to accomplish
- ◆ Identify policies and master plan to adopt locally in support of RR Park concept
- ◆ Contact others who have developed or are developing RR Parks to learn how they approached this.

### **Promotions**

Once feasibility studies are done, RMDOs could help prepare promotional materials to:

- ◆ Sell the concept locally (including with landowners, local elected officials and the media)
- ◆ Build support for adoption of local policies, strategy and budget
- ◆ Solicit local businesses to participate

- ◆ Attract other businesses to the RR Park
- ◆ Solicit funding to expand existing businesses or develop new ones to meet gaps in local services desired to be part of RR Park.

### **Other Roles**

RMDOs may choose to be the catalyst to put these projects together, or find someone in a position to make it happen locally. RMDOs may also help on financing for the RR Park acquisition, infrastructure, shared services and/or individual companies locating there. RMDOs may work with Planning Departments to develop zoning ordinances that steer new reuse, recycling and composting businesses towards the RR Park as the key designated area for these types of businesses in the community.

RMDOs may also help in permitting the RR Park, individual businesses, or developing a master environmental review document for the types of businesses anticipated. Finally, RMDOs could help establish a management structure (e.g., a RR Park Authority, Corporation or Nonprofit Agency) to be responsible for managing the development of the RR Park, if a private developer is not identified who would like to play this role.

### **Keys for RR Park Success**

RR Parks are not for everyone. They are most likely to succeed where:

- ◆ Landfill costs are high
- ◆ Landfill space is running out
- ◆ Land is available
- ◆ Markets for targeted wastes are inadequate or volatile

In addition, a RR Park is more likely to succeed if there is a public or private catalyst that has the resources, credibility and time available to develop such a project over a sustained period (5-10 years).

### **For More Information**

There is a lot of **information available about EcoParks**. Good places to explore first for information are:

President's Council on Sustainable Development  
[www.whitehouse.gov/PCSD](http://www.whitehouse.gov/PCSD)

Ernest Lowe, Indigo Development, 6423 Oakwood Drive, Oakland, CA 94611, 510-339-1090,  
[Elowe@indigodev.com](mailto:Elowe@indigodev.com) or [www.indigodev.com](http://www.indigodev.com)

Cornell Waste Management Institute  
[www.cfe.cornell.edu/WEI/EID.html](http://www.cfe.cornell.edu/WEI/EID.html)

**Information on RR Parks** is just starting to be developed. For more information, contact:

CA Integrated Waste Management Board, *Resource Recovery Parks Case Study*, May 2000, CIWMB Publications Clearinghouse at 1-800-CLEANUP or [www.ciwmb.ca.gov/ola/casestudies](http://www.ciwmb.ca.gov/ola/casestudies)

Urban Ore, Inc., *Generic Designs and Projected Performance for Two Sizes of Integrated Resource Recovery Facilities*, prepared for the West Virginia Solid Waste Management Board, January 1995.

Economic Development Alliance for Business, *Feasibility Study for Eco-Industrial Park*, May 1998, prepared by Kelly Runyon, Brown Vence & Associates, and Bart Blum and Steven Sherman, Eco Development Associates

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